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DETAILED STATEMENT
OF THE ROSE CHEMICALS STEERING COMMITTEE
REGARDING THE PROPOSED PLAN
MARTHA C. ROSE CHEMICALS INC., HOLDEN, MISSOURI

The Rose Chemicals Steering Committee ("RCSC"), consisting of entities who were customers of Martha C. Rose Chemicals, Inc. ("Rose Chemicals"), was formed to respond to certain notices issued in 1986 by the U.S. Environmental Protection Agency, Region VII ("EPA" and "Region VII", respectively), relating to the then-existing conditions at the Martha C. Rose Chemicals Site (the "Site"). Certain members of the RCSC and others entered into two administrative orders on consent with Region VII, the first in 1986, Administrative Order on Consent, Docket No. 86-F-0019, and the second in 1987, Administrative Order on Consent, Docket No. 87-F-0007. Pursuant to those administrative orders, the RCSC conducted certain response actions at the Site which included conducting a Remedial Investigation and Feasibility Study. On September 7, 1990, the RCSC resubmitted the final Feasibility Study Report to Region VII. In June 1991, Region VII issued EPA's Proposed Plan for the Site. The RCSC submits the following comments on the Proposed Plan.

A. INTRODUCTION

1. Background.

From 1982 until March 1, 1986, Rose Chemicals operated as a processing and treatment facility for equipment and machinery containing polychlorinated biphenyls ("PCBs") and PCB-contaminated oils. Rose Chemicals conducted its PCB operation under approvals issued by the EPA under the Toxic Substances Control Act, 15 U.S.C. §§ 2601 et seq. ("TSCA"). Those approvals allowed Rose Chemicals to decontaminate mineral oil dielectric fluids containing PCBs at concentrations equal to or less than 10,000 parts per million (ppm) (effective on March 15, 1983,

and expired on March 15, 1986); to process PCB capacitors for disposal (effective on October 15, 1983 and revoked by EPA letter dated July 9, 1986); to process PCB transformers for disposal (effective on July 1, 1984 and revoked by EPA letter dated July 9, 1986); and to simulate the loaded conditions of in-service use in order to reclassify electrical transformers that had contained PCBs in excess of 500 ppm. The members of the RCSC were among the more than 700 companies, cooperatives, municipalities and state and federal agencies who sent PCB items to Rose Chemicals for lawful processing and disposal under TSCA.

Throughout the period that it operated, however, Rose Chemicals conducted its business in a manner which violated TSCA regulations and the approvals issued by the EPA. Indeed, violations of federal regulations were discovered and were being discovered by the EPA and Region VII at the same time that the aforementioned approvals were being issued. Compliance inspections at the Holden facility were conducted by EPA personnel on November 3 and 4, 1983; August 7-15, 1984; December 19, 1985; January 7, 1986; February 26, 1986; and March 17, 1986. Each such inspection revealed violations of applicable PCB regulatory requirements, including violations of requirements for the storage and marking of PCBs and PCB items; inadequate record keeping; and violations of requirements for the disposal and distribution in commerce of PCBs and PCB items. In response to the above-referenced violations detected during the November 1983 inspection, the EPA filed an Administrative Complaint and Notice of Opportunity for Hearing against Rose Chemicals on or about March 26, 1984. The EPA and Rose Chemicals subsequently entered into a Consent Agreement and Final Order, effective June 26, 1984, wherein Rose Chemicals agreed to pay a penalty and take specific actions to come into compliance with the PCB rules and regulations. In response to the violations detected during the August 1984 inspection, the EPA filed a second Administrative Complaint and Notice of Opportunity for Hearing against Rose Chemicals on or about February 25, 1985. The EPA and Rose Chemicals subsequently entered into

a second Consent Agreement and Final Order, effective September 27, 1985, wherein Rose Chemicals agreed to pay a civil penalty and take specific actions to come into compliance with the PCB rules and regulations. Rose Chemicals failed to comply with the terms of both Consent Agreements and Final Orders, with the PCB rules and regulations, or with the EPA approvals.

Beginning in January 1985, the Occupational Safety and Health Administration ("OSHA") conducted inspections at the portions of the Holden facility used by Rose Chemicals and its sister company, American Steel Works, Inc. Based on air and wipe samples taken during the inspections, OSHA issued a citation on or about July 19, 1985, to Rose Chemicals and American Steel Works, Inc. which alleged violations of OSHA standards and assessed civil penalties. Investigations conducted by the EPA and/or the Missouri Department of Natural Resources in March 1986 detected PCBs in aquatic organisms downstream from the facility, in sewerage sludge at the City of Holden's publicly-owned treatment works, and in tributary and stream sediments downstream from the facility. The EPA believes these PCBs resulted from releases of PCBs at the Site. On March 1, 1986, Rose Chemicals ceased operations, and on or near that date abandoned the facility. In April and May 1986, Rose Chemicals notified, among others, the EPA and certain of its customers of its unwillingness to come into compliance with the PCB rules and regulations, and to properly dispose of PCB and PCB items at the facility.

When Rose Chemicals abandoned the facility in 1986, more than 14 million pounds of generator-sent PCBs and PCB-contaminated equipment and material were stored at the facility, much of which purportedly had been destroyed, and much of it stored in excess of the one-year limitation. On or about May 23, 1986, the EPA invoked its authority under the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §§9601 et seq.) ("CERCLA") ordering Rose Chemicals, its principals and related entities, to respond to the release or threat of release of PCBs from the facility. They refused to respond to the order. On July 9, 1986, more

than four months after Rose Chemicals had abandoned the facility, the EPA revoke the approvals it had issued to Rose Chemicals.

In or about May 1986, certain of Rose Chemicals' former customers began to form the RCSC. Beginning in late 1986, certain members of the RCSC entered into a series of administrative orders on consent with the EPA, pursuant to which the RCSC would conduct certain response actions at the Site financed by the RCSC and other Rose Chemicals customers. Since that time, the RCSC has undertaken the task of addressing conditions at the Site. It secured the Site, removed and properly disposed of more than 19 million pounds of PCB items and PCB-contaminated material, including contaminated soils, and conducted extensive studies to determine the nature and extent of the remaining contamination at the Site.

A preliminary investigation conducted by the RCSC in August 1986 determined that bulk hazardous materials, including metallic sodium, PCB-contaminated oil and PCB-contaminated transformer carcasses and capacitors had been abandoned at the Site. Of the 19 million pounds of materials removed from the Site, nearly 5 million pounds of liquids and 4.4 million pounds of capacitors were incinerated at an off-site facility. In addition, 4 million pounds of contaminated soil, sediments and concrete, and 1.9 million pounds of transformer carcasses were removed from the Site and sent to a TSCA landfill. Some of the soils that were removed and landfilled during the immediate response action showed concentrations of PCBs well in excess of 15,000 milligrams per kilogram (mg/kg). Drums which had contained the drummed liquids were cleaned, crushed and sent to a TSCA landfill for disposal.

The RCSC performed a Remedial Investigation to determine the nature and extent of residual contamination at the Site. Sampling conducted in connection with the Remedial Investigation documented PCB contamination at a number of locations. Analytical results showed some areas of surface soils contaminated with PCBs up to 540 mg/kg remained at the Site, and the

walls of the buildings at the Site contaminated with PCBs up to 1,180 micrograms per 100 square centimeters. Soil beneath the building was sampled and results showed PCBs present underneath the building at concentrations up to 18.5 mg/kg. Sediments in a nearby stream also were sampled and results documented concentrations of PCBs between 0.3 mg/kg and 122 mg/kg.

Based on the findings of the Remedial Investigation, the RCSC conducted a Feasibility Study ("FS"), primarily to survey and evaluate technologies available to remediate conditions at the Site. The final FS Report was submitted to EPA on September 7, 1990. Through the end of June 1991, the RCSC had spent approximately $15,000,000 in connection with the response activities undertaken at the Site.

2. Summary of Feasibility Study Findings.

The Rose Chemicals' FS Report identifies and evaluates several remedial alternatives for the Rose Chemicals Site. The basic strategy for four of the alternatives -- 2, 3A, 4 and 5A -- involves constructing a multi-media final cover system ("cap") to isolate site soils and/or concrete contaminated with PCBs at levels above 10 mg/kg. Three alternatives -- 3B, 5B and 6 -- are removal alternatives; site soils contaminated with more than 10 mg/kg PCBs would be excavated and removed from the Site altogether. Of the capping alternatives, the FS Report concluded that Alternative 4 was the best alternative because it would remove above-grade contaminated building structures rather than trying to decontaminate them, a costly, time-consuming and iterative process that might not result in the buildings being adequately decontaminated. Of the three removal alternatives, the FS Report determined that Alternative 6 was the best option because it removed the contaminated buildings and concrete, rather than trying to decontaminate them.

The FS Report analysis narrowed the alternatives to a comparison of Alternatives 4 and 6. Both alternatives include the removal of on-site and off-site sediments contaminated with

PCBs and the removal of above-grade building structures. Under Alternative 4, a multi-media cap would be constructed to isolate soils contaminated with PCBs at levels above 10 mg/kg, as well as capping the concrete, while Alternative 6 would remove the soil and concrete. The FS Report concluded that both alternatives protect human health and the environment and provided long- term effectiveness and permanence; in terms of risk, the two alternatives were viewed as equivalent. Alternative 4 creates lower potential short-term health risks than Alternative 6. Alternative 6 also would cost at a minimum 60% more to implement than Alternative 4.

3. The Proposed Remedy.

On June 20, 1991, Region VII issued for public comment its Proposed Plan, identifying the EPA's preferred option for remedial action to address contamination at the Site (the "Proposed Remedy"). Region VII has selected Alternative 6 as the basic component of the Proposed Remedy. Region VII also has proposed that the alternative be modified to include the incineration of certain soil and building structures, including concrete, prior to their being disposed in an off-site landfill. The Proposed Remedy is to include incineration of soils contaminated significantly above 100 ppm and concrete contaminated above 2,500 ppm apparently for two reasons. First, Region VII points to a guidance document entitled Guidance on Remedial Actions for Superfund Sites With PCB Contamination (OSWER Directive No. 9355.4-01) (hereinafter the "Guidance Document"), published on August 15, 1990. Region VII reads the Guidance Document as requiring the incineration of soils and concrete prior to their off-site disposal. Second, Region VII apparently believes that incineration or equivalent treatment is necessary to meet CERCLA's so-called "preference for treatment". Aside from Region VII's perception that CERCLA, the NCP and/or the Guidance Document requires incineration, however, the Proposed Plan makes no claim

that Alternative 6 without an incineration component or the capping alternatives discussed in the FS Report is insufficient or inadequate under the law.

B. COMMENTS

As more fully set forth below, the Proposed Remedy is not any more protective of human health and the environment, nor more effective or permanent over the short- or long-term, than the alternatives which remove and/or isolate the remaining contaminated materials at the Site. Alternative 4, which involves removal of building structures and the capping of certain site soils and concrete, and Alternative 6 are equally effective at achieving remediation goals at the Site. Alternative 4, however, can be implemented in a manner that reduces short-term threats and for far less cost than either Alternative 6 alone, or as modified by the Proposed Plan.

Moreover, the proposal to require further incineration as a component of the final remedy for this Site is based on Region VII's misinterpretation of the CERCLA legal mandate. Apparently, Region VII has added this feature, not for any meaningful purpose such as making the remedy more protective, but simply because it feels compelled to do so by the Guidance Document and CERCLA's preference for treatment. Neither the Guidance Document, CERCLA, nor the National Contingency Plan ("NCP") mandates any further incineration for the remaining remediation of the Rose Chemicals Site. Without providing any tangible benefits in terms of risk reduction at the Site, requiring incineration of any of the remaining materials will result in a far more costly remedy. More important, it also will increase the potential for future CERCLA liability to those who undertake the proposed remedy. In addition to the TSCA landfill which would ultimately receive the materials for disposal, one would incur potential future CERCLA liability at the treatment facility itself. As a practical matter, one can hardly justify or be expected to assume

the significant additional expense of incineration where it will result in no meaningful benefit at the Site but will instead increase substantially the potential for future CERCLA liability.

1. The Proposed Remedy Is Not More Protective Or Effective Than Alternatives Involving Capping.

Measured against the criteria set forth in the NCP, Region VII's Proposed Remedy is not any more protective of human health and the environment, nor more effective or permanent over the short- or long-term than alternatives involving capping.[1] Of course, Region VII makes no such claim in the Proposed Plan. Instead, Region VII, without explanation, selects Alternative 6 as the "basic component" of the Proposed Remedy. As the FS Report concluded, however, capping alternatives achieve the same level of protection as Alternative 6, and can be implemented in a manner that reduces short-term risks and at far less cost than the Proposed Remedy.

a. **Overall Protection of Human Health and the Environment.** This criterion assesses whether an alternative "can adequately protect human health and the environment, in both the short-term and long-term, from unacceptable risks posed by hazardous substances, pollutants or contaminants present at the site by eliminating, reducing, or controlling exposure to levels established during the development of remediation goals." 40 CFR §300.430(e)(9)(iii)(A). The FS Report concluded that the capping alternatives will achieve the same degree of overall protection of human health and the environment as Alternative 6, and Region VII's Proposed Plan confirms this conclusion.

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[1] These comments evaluate the Proposed Remedy as compared with the other alternatives identified in the FS process with respect to seven of the nine criteria in the NCP. The "community acceptance" and "state acceptance" criteria necessarily cannot be evaluated because the public comment period is on-going and because the state has reserved its right to comment. The RCSC understands, however, that the City of Holden has or will object to the Proposed Remedy because, in the City's view, the Proposed Remedy will take much longer to implement than alternatives not involving incineration.

The remediation goal for the Site is "to clean up the site to meet acceptable health risk levels ($\leq 10^{-6}$) established by the NCP." (Proposed Plan at 8). As extensive studies conducted at the Site have demonstrated, the Site, in its current condition, presents unacceptable health risks because of the potential for dermal contact with existing building floors and walls and stream sediments, and indoor vapor inhalation within existing buildings. In addition, if the Site, in its current state, were to be developed for residential use, unacceptable health risks would result from the potential for soil ingestion by a child. Notably, Region VII and the Missouri Department of Natural Resources have concluded that groundwater pathways do not present any actual health risk at the Site.

The capping alternatives thoroughly address the health risk concerns identified by the FS Report and Region VII. All would remove on-site and off-site stream sediments that contain PCBs, reducing health risks to off-site residents below the 10^{-6} level for the beef ingestion pathway. The capping alternatives also would remove certain on-site soils containing PCBs and cap selected portions of the Site to reduce health risks to future on-site maintenance workers or trespassers by preventing dermal contact.

Risk associated with contaminated building structures are reduced or eliminated under the capping alternatives. Risk levels are reduced below the 10^{-6} level by fencing or boarding of the buildings under Alternative 2, or by decontamination of the buildings under Alternatives 3A and 5A. Risks associated with building structures are eliminated altogether under Alternative 4, where building structures are removed leaving only the concrete slabs intact. The concrete slabs are covered by the cap. As such, Alternative 4 eliminates all risks associated with building structures, addresses all actual health risk pathways identified by the FS Report, and achieves the 10^{-6} level. Alternative 4 is equivalent to Alternative 6 in reaching remedial action objectives. As such, Region VII's decision to select Alternative 6 as the basic component of the Proposed Remedy

over the capping alternatives cannot be justified on the basis that it is more protective of human health and the environment than Alternative 4.

Moreover, the addition of an incineration component does not render the Proposed Remedy any more protective than any other alternative. Alternatives requiring installation of the multi-media cap already will reduce risks below the 10^{-6} level and are equivalent to Alternative 6 alone. As a component of Alternative 6, further incineration provides absolutely no additional benefit in terms of reducing risks at the Site. The inclusion of incineration as part of the Proposed Remedy will only result in marginal reduction in the mass of materials at their ultimate resting place -- an off-site TSCA landfill. Whether incineration is a component of the clean-up or not under Alternative 6, materials will be taken to an engineered TSCA landfill because both response alternatives contemplate removal from the Site of those materials -- both remedies provide the same degree of overall protection at the Site. In short, the Proposed Remedy does not provide any greater protection to human health and the environment than the capping alternatives or Alternative 6 standing alone.

b. **Compliance With ARARs.** Remedial actions must satisfy the applicable or relevant and appropriate requirements ("ARARs") established by the EPA or the State. "Applicable" requirements are those clean-up standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal or state environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance found at a CERCLA site. "Relevant and appropriate" requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal or state environmental or facility siting laws that, while not "applicable", address problems or situations sufficiently similar to those encountered at that Superfund site, that their use is well-suited to the particular site. In addition to ARARs, many

federal and state programs have developed criteria, advisories, guidelines or proposed standards that may provide useful information or recommend procedures. These criteria, or "TBCs", are "to be considered" in the formulation of remedial action objectives if no ARARs exist or if existing ARARs do not provide protection.

Virtually all of the alternatives discussed in the FS Report would comply with ARARs and TBCs. Region VII, nevertheless, apparently believes that the Guidance Document is a TBC which mandates further incineration of PCB-contaminated materials at the Site. As explained later in these comments, Region VII simply is mistaken in concluding that the Guidance Document is relevant at the Site. Foremost, the Guidance Document, by its terms, relates to situations where PCBs at or above certain levels could or are intended to remain at the Site. In this instance, once Region VII decided to select Alternative 6 as the basic remedial alternative, the terms of the Guidance Document simply bear no relevance and warrant no further consideration. The materials that Region VII says will require treatment are not those that would remain at the Site under Alternative 6 and thus PCB concentration levels triggering the Guidance Document's recommendations will not exist at the Site. Alternative 6, standing alone, meets all ARARs and TBCs and the Guidance Document terms are superfluous. Moreover, the Guidance Document indicates that containment is an appropriate method of addressing soils contaminated over certain levels. Incineration is not required by the EPA's guidance. More important, the Guidance Document does not even address concrete. Even if the Guidance Document were at all relevant to the Site, Region VII's inclusion of a requirement to incinerate concrete finds absolutely no basis in practice, law, or the Guidance Document.

c. **Long-term Effectiveness and Permanence**. The Proposed Remedy and the capping alternatives provide essentially the same degree of long-term effectiveness and permanence. While the long-term effectiveness of a capping alternative is dependent on the maintenance of the

cap, at this Site, the principal purpose the cap will serve is such that the risk of remedy failure is diminished to the point of non-existence. First, capping is a well-known, reliable and proven technology. Moreover, the use of a cap at this Site involves less risk of "remedy failure" than at other sites because the purpose of this cap, from a risk reduction standpoint, is more limited than in the usual capping scenarios. As the Proposed Plan notes, the principal health risks posed at the Site arise from pathways associated with inhalation or dermal contact with PCB-contaminated materials. Groundwater pathways are not a concern at this Site for a number of reasons, including the fact that the groundwater unit underlying the Site is isolated and unusable. The principal purpose to be served by a cap at this Site will be to isolate contaminated materials so as to prevent the risk of direct contact between people and livestock and PCBs. As such, the ability of the cap to eliminate infiltration is not the prominent concern it would otherwise be at a different site where preventing the threat of groundwater contamination would be a principal aim of the cap. Maintenance of a cap in the long term at this Site simply does not implicate the same concerns which would arise at other sites.

Moreover, adding an incineration component to Alternative 6 does not render Alternative 6 any more effective or permanent than without incineration. Conditions at the Site will be exactly the same after the implementation of either Alternative 6 or the Proposed Remedy. One might conjure that incineration of the remaining materials will achieve better "long-term effectiveness"; however, that position can only rest on the notion that the destruction of any single molecule of a contaminant prior to its placement in a TSCA landfill is a prerequisite to achieving long-term effectiveness within the meaning of the NCP. It also presupposes that placement of these particular materials in a TSCA landfill is not an effective method of disposing of PCB-contaminated materials in the long term. While either of the propositions may be true in the abstract, in the present situation one cannot quantify or even conceptualize the additional long-term risk associated

with the addition of the approximately 3,500 pounds of PCBs to a TSCA-licensed landfill that receives hundreds of tons of materials a day, including materials with PCB concentrations far in excess of that which remain at the Site. Region VII does not calculate, nor even attempts to postulate, the truly marginal reduction in risk incineration of these materials would achieve relative to a licensed facility which receives much larger volumes of material contaminated at levels exceeding those proposed for incineration here. Indeed, requiring the incineration of these remaining soils goes far beyond the currently accepted practice for disposing of PCB-contaminated soil. The TSCA disposal regulations expressly allow the land disposal of non-liquid PCBs at concentrations greater than 50 ppm, including contaminated soil, in a TSCA-approved landfill. 40 CFR §761.60(a)(5). Requiring incineration of this material makes little sense when TSCA landfills on a regular basis receive PCB-contaminated soil and debris in concentrations far exceeding those found at Rose Chemicals. Whether this material is landfilled with or without first being incinerated will not make any difference in the long- term at the off-site facility. Of course, it makes no difference at all with respect to the Site itself.

d. **Reduction of Toxicity, Mobility or Volume Through Treatment.** The EPA has indicated that this criterion is included in the NCP to "address[ ] the statutory preference for selecting remedial actions that employ treatment technologies that permanently reduce the toxicity, mobility or volume of the hazardous substances as a principal element." 55 Fed. Reg. at 8720-21. As is stated later in these comments, this criterion has already been satisfied at the Site as a result of the incineration of 9.4 million pounds of PCBs, PCB-contaminated material, and other hazardous substances pursuant to the administrative orders.

e. **Short-term Effectiveness.** While it adds no discernable long-term benefit to the overall remediation of the Site, the Proposed Remedy adds notable, quantifiable risks to identified populations over the short-term. As such, the net effect of the Proposed Remedy, in very

real terms, is the selection of an overall clean-up program that is less protective and less effective at reducing risks than one that avoids excavation, removal and incineration of soils and concrete. The Proposed Remedy will result in a dramatic increase in risk exposure to workers. Cutting, excavation and removal activities (including segregating and sampling of concrete that would be necessary by the incineration component of the Proposed Remedy), by necessity, will increase potential exposure to workers and will result in greater potential for particulate emissions during the cutting process.

The incineration component of the Proposed Remedy will increase short-term risks even further. In addition to the increased worker exposure during the extra on-site activities required by incineration, increased travel times and distances required by delivery to an off-site incinerator measurably increase short-term exposure risks. Transportation risks can be quantified, based on the expected numbers of loads and travel distances required, and on data developed by the U.S. Department of Transportation. The risks of accident, injury and fatalities will be substantially higher if material must first be transported to an incinerator and then sent to a TSCA landfill. Of course, no transportation is required under Alternative 4. Moreover, incineration is a dynamic process with many inherent risks. Factors such as incinerator shutdown based on pollution control equipment failure, improper feeds or combustion parameter exceedances would all increase risks associated with incineration. While such risks may be difficult to quantify they are nonetheless real.

f. **Implementability.** In terms of their implementability, the Proposed Remedy and the capping alternatives are essentially the same except in one significant respect -- the Proposed Remedy will take a longer time to implement.

The capping alternatives each involves the use of proven technologies. These alternatives require equipment which is generally available for excavation, construction, treatment

and decontamination. Construction of a multi-media cap would require special materials and technicians but these also are readily available. Special approvals and waivers from the Regional Administrator might be required for the installation of the cap. However, these alternatives can be expected to be implemented within 12 and 24 months.

The Proposed Remedy requires the incineration of certain soils and building structures including concrete. The FS Report indicated that Alternative 6 with off-site incineration of all soils over 10 mg/kg would require approximately 154 months to implement. While the Proposed Remedy indicates that Region VII conducted an updated survey of incineration vendors to determine costs associated with incineration, it does not show the basis for its estimate of 15 months to completion of the Proposed Remedy. Incineration capacity can fluctuate dramatically over short periods of time. Since the beginning of this year, at least one of the four incinerators licensed to burn PCBs is no longer on-line. The vendor, ENSCO, Inc., simply has made a business decision that it will no longer incinerate PCB wastes. Another facility was down for several months due to regulatory deficiencies, although it reportedly went back on-line recently. The two other incinerators do not have feed systems in place to handle effectively contaminated soil. Both operators have indicated that PCB soil or concrete must be placed in 30-gallon chargers (drums) prior to feeding their incinerators. That requirement is prohibitively expensive for the quantities being considered. If the Proposed Remedy were implemented today, only one facility would be able to incinerate effectively the materials Region VII wants incinerated. Because the Proposed Plan gives no basis for Region VII's 15-month estimate to completion, the RCSC cannot effectively comment on it although the RCSC believes that estimate seriously understates the amount of time that would be necessary. In any event, the accuracy of that estimate is far less certain than those associated with the installation of a cap.

g. Cost. Assuming the cost estimate prepared by Region VII is accurate, the Proposed Remedy will cost more than $13.6 million. By contrast, the cost estimates for the capping alternatives range from $3.6 million to $8.8 million. Alternative 4 is estimated to cost $6.1 million.

Neither CERCLA nor the NCP allows the selection of a remedy that costs more than twice the amount of another, equally protective and ARAR-compliant remedy. As the Proposed Plan acknowledges, the principal threat remaining at the Site arises from the risk of dermal contact with PCB-contaminated soils, or vapor inhalation within the buildings. Alternative 4 addresses these risks completely by removing the buildings and isolating the remaining PCB-contaminated soils. Region VII simply cannot justify the selection of a remedy such as Alternative 6, estimated to cost more than $12 million even without incineration, over a remedy such as Alternative 4 which will cost half that amount, without showing some tangible difference between the effectiveness of these two remedies in addressing actual health risks.

The additional requirement that certain materials removed from the Site are also to be incinerated, simply layers more costs without any benefits as compared with either Alternative 4 or Alternative 6. Region VII estimates that the incineration of more than 1,000 tons of PCB-contaminated materials will cost an additional $1.5 million over the estimated cost of Alternative 6 without incineration. The RCSC questions the basis and accuracy of this increment, but even if accurate, it plainly cannot be justified by any risk reduction at the Site because Site conditions will be exactly the same after implementation of either alternative. All contaminated material will have been removed from the Site -- the only difference will be that some of this material will have been incinerated prior to being disposed in a facility licensed to received PCB-contaminated materials and, indeed, that receives materials contaminated at levels far in excess of that which Region VII proposes to incinerate.

2. The Preference For Treatment Does Not Require Further Incineration At This Superfund Site.

Region VII includes an incineration component in the Proposed Remedy for the Site apparently because it construes CERCLA's preference for treatment to require some treatment in the final remedy selected for a Superfund site. That interpretation of Section 121(b) of CERCLA is plainly erroneous. Section 121(b) does not require that the EPA select remedies that utilize treatment.

Both Congress and the EPA acknowledge that treatment was not and is not required in all cases. The legislative history of Section 121 counsels against the selection of "foolish, costly remedies" where alternative cost-effective remedies are equally protective:

> This does not require the selection of the "most permanent" remedy available; it is not intended that EPA spend millions of dollars incinerating vast amounts of slightly contaminated materials where other cost-effective alternatives would provide a high degree of permanence and protection of public health and the environment. Although remedies will be more permanent after enactment of this provision, the EPA should consider a range of permanent solutions which meet, together or in combination, the requirements of this provision.
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> In other words, although this section establishes strict standards for cleanups, it does not direct the selection of foolish, costly remedies where alternative cost-effective remedies protect the public health and the environment.

132 Cong. Rec. H9567 (daily ed. Oct. 8, 1986) (Statement of Rep. Dingell).

The EPA itself seems to recognize that the point of treatment is to reduce risks at a site; the NCP mandates consideration of "the degree to which treatment reduces the inherent hazards posed by principal threats at the site," rather than from contaminants at the site. 40 C.F.R. §300.403(e)(9)(iii)(D)(6) (emphasis added); see also the Preamble to the NCP, 55 Fed. Reg. at 8701 ("the goal and expectations [treatment] should be considered when making site-specific

determinations"); id. at 8721 ("the purpose of treatment in the Superfund Program is to . . . decrease the inherent hazards posed by a site").

Fortunately, one need not debate whether the preference for treatment is a mandate for treatment. Requiring "some treatment" as part of the Proposed Remedy ignores that at this Superfund site the principal threats have already been addressed through treatment. Nearly 4.5 million pounds of liquids and 4.4 million pounds of capacitors have already been incinerated pursuant to administrative orders issued by Region VII. Over 99% of all PCBs originally found at the Site have been treated. Notwithstanding that plain fact, the Proposed Plan calls for the incineration of an estimated 25 million more pounds of soil and concrete to destroy less than eight-tenths of one percent of the PCBs.

Requiring more incineration to satisfy the treatment "requirement" means Region VII views initial response actions as completely separate environmental clean-up activities that occur at a given site. That view is both short-sighted and contrary to the way the EPA has said Superfund clean-ups and their component parts are to be regarded. In its Preamble discussion of the 1990 NCP, the EPA explains that remedial and removal actions are not completely separate activities but rather are tools to be evaluated as part of the "strategic planning" at the beginning of the site evaluation. 55 Fed. Reg. at 8702, 8705, 8706. "Site management planning is a dynamic, ongoing and informal strategic planning effort that generally starts as soon as sites are proposed for inclusion on the NPL and continues through the RI/FS and remedy selection process and the remedial design and remedial action phases." Id. at 8702. The EPA goes on to explain that this "dynamic" process is designed to identify "the optimal set and sequence of actions necessary to address the site problem," (id. at 8706) and, more importantly, is meant to enable the EPA to encourage early interim response actions to achieve significant risk reductions quickly. 40 C.F.R. §300.430(a)(1)(ii)(A).

The "process" that the EPA describes is one that acknowledges that denoting response measures as either remedial or removal is less important than identifying an overall remediation strategy and implementing response actions that fit that strategy, as early as possible. The NCP, in fact, encourages prompt response to environmental contaminants. The EPA noted that several commentors on the NCP stated that the "EPA's bias for action should be codified in the regulation to communicate that interim measures may be a legitimate component of the remedy selection process [,] . . . that greater emphasis is needed on the importance of interim measures and . . . that these interim measures should be consistent with the remedial solution likely to be selected." 55 Fed. Reg. at 8705. This concept was acknowledged by the EPA and codified in the scoping section of the remedial investigation/feasibility study provision: "Specifically, the lead agency shall: (1) assemble and evaluate existing data on the site, including the results of any removal actions." 40 C.F.R. §300.430(b)(1) (emphasis added). Further, the NCP provides that "interim action operable units, should not be inconsistent with nor preclude implementation of the expected final remedy," 40 C.F.R. §300.430(a)(1)(ii)(B), and that, as part of the FS, a no-action alternative shall be developed "if some removal or remedial action has already occurred at the site." 40 C.F.R. §300.430(e)(6).

These provisions of the NCP and statements by the EPA espouse a policy that overall clean-up strategies should be viewed and evaluated as a whole rather than in the piecemeal fashion Region VII has chosen to use at this Site. Plainly, Region VII should have considered the results of the early clean-up work and the role that treatment played during that effort, in developing the final part of the site remediation strategy. The response actions taken by the RCSC to date addressed the "principal threats" posed at this Site, through the destruction of over 99% of the PCBs initially there, well before the lengthy RI/FS process was begun. Ignoring that plain fact cannot be justified by an unduly narrow construction of the NCP. In this instance, it leads to an

arbitrary and absurd result -- as noted earlier, the regular and permitted practice for disposing of PCB-contaminated soil and debris is to send it to a TSCA landfill. Indeed, soils from this Site with PCBs in excess 15,000 mg/kg have already been disposed of at a TSCA landfill with Region VII's approval.

Furthermore, Region VII's construction of the NCP in the context of this Site can only result in creating a disincentive for early and swift action by PRP groups to address the principal threats posed at any site. The lesson to be learned from the present case will be, 'study the site first and do the clean-up later.' That sort of result, Congress would plainly reject and the EPA says should not happen.

3. The Guidance Document Is Inapplicable And Warrants No Consideration.

First, and foremost, the Guidance Document is not legally compelling. Only provisions promulgated by Congress in statutes or by the EPA in proper notice and comment rule-making can have the force of law. The EPA's multitudinous issuance of paper under various names or guises cannot create requirements that do not exist independently pursuant to statute or regulation. To the extent that such EPA pronouncements properly interpret and apply statutory and regulatory requirements they may provide useful insights; to the extent such pronouncements attempt to expand on existing requirements or create new ones, they are invalid.

Here, the issue of invalidity need not be reached. As has happened in the past in connection with Rose Chemicals, Region VII again has failed to interpret, understand or apply

properly EPA guidance and requirements.[2] As will be demonstrated below, the Guidance Document is only concerned with PCB contaminant levels that will remain at a Superfund site. To the extent contaminated materials are removed from a Superfund site, the Guidance Document simply is not relevant; it does not address, nor was it intended to address, the issue of how such removed materials must be handled (incineration, equivalent treatment or chemical waste landfilling).

Section 6 of the Proposed Plan states: "EPA has determined that Alternative 6 is the preferred remedy. However, there is concern with the selection of a PCB disposal method:" (P.P. 16) The discussion continues by referencing the Guidance Document and its consideration of treating soil and debris contaminated in excess of 100 ppm. Region VII's Proposed Plan recognizes that the Guidance Document does not address contaminated concrete at all, and in fact gives no specific reference to any EPA materials that do, but then the Proposed Plan goes on to propose the incineration of soils and debris contaminated significantly above 100 ppm and concrete contaminated above 2500 ppm.

Reliance on the Guidance Document to justify a proposed remedy that requires incineration as part of Alternative 6 is completely flawed. The only concern in the Guidance Document is contamination levels left at Superfund sites; once the decision is made to remove contaminated materials, the terms of the Guidance Document are irrelevant. Alternative 6 proposes the removal of all soils contaminated above 10 mg/kg. The disposition of those materials

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[2] The first regulatory failure of Region VII was its failure to apply effectively and efficiently its statutory and regulatory authority to prevent Rose Chemicals from becoming a Superfund site. A second and more comparable, although less severe failure occurred when Region VII insisted that compliance with the so-called "Off-Site Policy" be included in the second administrative order, Administrative Order on Consent, Docket 87-F-0007. The RCSC repeatedly warned Region VII that this would cause litigation, which it did (Chemical Waste Management, Inc. v. EPA, No. 87-24115 (D. Kan.)) and which EPA was losing at every turn (e.g., preliminary restraining order entered August 10, 1987) until the case was settled by changing significantly the Off-Site Policy.

once they are removed from the Site simply is not a subject of the Guidance Document. Using the Guidance Document as the basis for incinerating materials that are already designated for removal, is a continuation of Region VII's failure to respond properly to Rose Chemicals.

Quoting and discussing every single provision in the Guidance Document illustrating that it is only concerned with PCB contaminant levels that exist and will remain at the Superfund site would extremely prolong these comments. Nevertheless, Region VII's past and continuing failures to understand and interpret properly EPA guidance and requirements necessitates some specific references (with emphasis added):

> In particular, the expectation that principal threats at the site should be treated, whenever practicable, and that consideration should be given to containment of low threat material, forms the basis for assembling alternatives. Principal threats will generally include material contaminated at concentrations exceeding 100 ppm for sites in residential areas and concentrations exceeding 500 ppm for sites in industrial areas (Guidance Document iv, hereafter e.g., "G.D. iv".)
>
> Containment of waste that poses a low, long-term threat or where treatment is impracticable,... Remedies that combine treatment of principal threats with containment and institutional control for treatment residuals and untreated waste (G.D. 5)
>
> 1. Identify remedial action response objectives including the preliminary remediation goals but define the appropriate concentrations of PCBs that could remain at the site without management controls.
> 2. Identify general response action such as excavation and treatment, containment, or in-situ treatment. (Id.)
>
> Determination of the appropriate concentration of PCBs that can remain at a site (remediation goal) under various site-use assumptions. (G.D. 6)
>
> The concentration of PCBs in the soil above which some action should be considered (i.e., treatment or containment) will depend primarily on the exposure estimated in the baseline risk assessment based on current and potential future land use. (G.D. 27)
>
> The concentration that defines the area over which some action must be taken is the concentration of PCBs that can protectively be left on-site without management controls (G.D. 28)

> As described in Section 1, one of the Superfund expectations is that principal threats at a site will be treated wherever practicable and that low-threat materials will be contained and managed (G.D. 39)
>
> In some cases it may be appropriate to treat material contaminated at concentrations lower than what would otherwise define the principal threats because it is cost-effective considering the cost of treatment versus the cost of containment, because the site is located in a sensitive area...In other cases, it may be appropriate to contain the principal threats as well as the low-threat material because there are large volumes of contaminated material...(G.D. 40)

Each of these provisions (and, indeed, many other) in the Guidance Document illustrates that the Guidance Document is only concerned with action levels and actions taken pertaining to PCB-contaminated materials that will be left at the Superfund site. Once those materials are, as an alternative, removed from the site, the Guidance Document is no longer relevant as to how they are handled. One of the best illustrations of this is contained in Chapter 1 of the Guidance Document where it discusses the general guidance on the development of alternatives:

> Remedial actions will fall into three general categories: overall reduction of PCB concentrations at the site (through removal or treatment) such that the site can be used without restrictions, complete containment of the PCBs present at the site with appropriate long-term management controls and access restrictions, and a combination of these options in which high concentrations are reduced through removal or treatment but the levels remaining still warrant some management control. (G.D. 6)

As is evident in the foregoing passage, removal is an alternative to treatment for purposes of fulfilling the objectives of the statute and regulations underlying the Guidance Document. Whether materials that are or may be removed have to be treated, as previously stated, cannot be determined on the basis of, or interpretations in the Guidance Document because it simply is not directed at that question. Use of the Guidance Document to justify requiring treatment of certain of the materials that would be removed under Alternative 6 is simply another case of misunderstanding, misapplication or misinterpretation of EPA policies and requirements by Region VII. Not only is

there no basis in any legally compelling provision discussed in the Guidance Document that justifies requiring such treatment, but removal is considered sufficient in and of itself for fulfilling the objectives of the Guidance Document. Once removed, the generally accepted and permitted practice for such materials is disposal in a TCSA landfill.

The Proposed Plan makes no comparison of the Proposed Remedy with Alternative 4, but, even for Alternative 4, the Guidance Document does not indicate that capping as an alternative is in any way unacceptable. As noted earlier, the FS Report concluded (and the Proposed Plan does not otherwise dispute) Alternative 4 and Alternative 6 are equally protective of public health and the environment. As such, that statutory requirement does not dictate a choice between those two alternatives. The Guidance Document, which cannot create requirements not otherwise contained in the statute or properly promulgated regulations, also recognizes that containment is an appropriate method of control in many circumstances. The Guidance Document repeatedly recognizes that containment, with any appropriate or necessary management controls or institutional controls, can be an acceptable way of addressing on-site risks. See, e.g., G. D. at 40. ("In other cases, it may be appropriate to contain the principal threats as well as the low-threat material because there are large volumes of contaminated materials, because the PCBs are mixed with other contaminants that make treatment impractical, or because principal threats are not accessible. . .") The Guidance Document only suggests certain levels of contamination that can trigger consideration of possible remedial action, it does not, and in fact cannot, dictate what that remedial action may be in any given situation. Furthermore, the Guidance Document correctly recognizes that containment can be and is an appropriate and acceptable remedial action. Alternative 4 meets all of the necessary criteria for remedy selection, it is consistent with the applicable statutory and regulatory requirements, and it is consistent with the Guidance Document.

The Guidance Document provides no reason, or analysis, and can provide no requirement, to suggest that any remedy beyond Alternative 4, and certainly any beyond Alternative 6, is necessary at the Site.

4. Continued Groundwater Monitoring, As Part of the Proposed Remedy, Is Unwarranted and Unnecessary.

The Proposed Remedy's inclusion of continued groundwater monitoring as a component of a remedy that proposes excavation and removal of soils and concrete contaminated above 10 ppm is unwarranted. At Region VII's request, an evaluation of the risk presented by the groundwater pathway was made in the Rose Chemicals Remedial Investigation. Region VII and the State of Missouri have concluded that the Site poses no threat to any usable groundwater resources. (P.P. 6)

The Region's tentative selection of what is essentially a source removal program would eliminate all regulated contaminants from a site which the EPA and the State have already concluded poses no threat to any usable groundwater resources. Even if Alternative 6 presented a rational, cost-effective program that could otherwise be justified, continued groundwater monitoring is a superfluous requirement which does not conform with the basic philosophy of that program or the needs of the Site. It is another unnecessary component that needlessly increases the cost of the proposed remediation program.

C. CONCLUSION

The Proposed Plan does not present a rational, cost-effective program that can be justified under CERCLA and the NCP. The selection of Alternative 6 as the basic component of the Proposed Remedy is unsupported by the FS and unsupported by the Proposed Plan. When evaluated by the criteria established in the NCP, Alternative 4 emerges as the preferred alternative.

Alternative 4 is protective of human health and the environment and is ARAR-compliant. As compared with Alternative 6, it is equally effective over the long term and is more effective over the short term. It also will cost half as much as Alternative 6.

The additional requirements of the Proposed Remedy, particularly incineration, are unwarranted and unnecessary. CERCLA's preference for treatment has been satisfied through the early destruction of the principal threats at the Site and Region VII's refusal to acknowledge that fact is contrary to EPA policy. The Guidance Document has been misinterpreted by Region VII; by its very terms, it does not require further incineration. The incineration component simply makes the Proposed Remedy far more costly and time-consuming to implement, as compared to any other alternative, without adding any tangible benefits to the remediation of the Site.

Finally, the inclusion of continued groundwater monitoring as a component of the Proposed Remedy is unnecessary and unwarranted. The Proposed Remedy is essentially a source removal program for a site that the Region and the State have concluded poses no threat to any usable groundwater. Continued groundwater monitoring is unnecessary and unwarranted and simply adds more cost to the Proposed Remedy.

ROSE CHEMICALS STEERING COMMITTEE